# Amer Tanwani

A life long learner and risk taker who want to explore new endeavors that come in my way. I love Mathematics, Programming and Computer Science in general. Learning Golang Nowadays.

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### **EDUCATION**

### **Bachelor of Computer Engineering**

Ghulam Ishaq Khan Institue of Engineering Sciences and Technology

08/2014 - 06/2018

3.27/4.00

Courses

- Introduction to Computing and Programming
- System Programming
- Applied Artificial Intelligence
- Technology Management
- Data Structures and Algorithms
- Databases
- Compiler Construction
- Wireless and Mobile Networks

### F.Sc Pre Engineering

Bahria Foundation College NORE - 1 Karachi

08/2011 - 08/2013

844/1100

### Matriculation

Rangers Public School Nawabshah

08/2009 - 08/2011

946/1100

### **PROJECTS**

### Simon Game Implementation Using Logic Gates (11/2015 - 12/2015)

Fall 2015 Digital Fundamentals Project. What i learnt from this project that it is very difficult to make simon game using simple logic ICs such as adder, mux. decoders etc yet not impossible. I was not able to complete it.

#### Tesla Coil (04/2016 – 05/2016)

Spring 2016 Electronics Project. This project is the demonstration of wireless electricity transmission. This project requires expertise in basic physics and electronics concepts. What i learned from this project that if you want to work on something ambitious then you have to start early. Status: Did not work.

### ATM Simulation System using Object Oriented and Analysis Design (08/2016 - 12/2016)

Fall 2016 - This is the implementation of ATM simulation project in JAVA using OOAD. The project involved making UML diagrams, identifying design patterns and implementation. My suggestion here explore alternative resources on the internet to get the more know how of the subject in hand.

#### Line Follower Robot (10/2016 - 12/2016)

Fall 2016 - Micro controller Project. Made line follower robot using 8051. I have made PCB using etching. I realized that electronics requires much more time in debugging so be prepared to face them.

### Sociological Analysis of Artificial Intelligence (10/2016 – 12/2016)

Fall 2016 Sociology Project. The motive behind choosing this project that we want to understand the implications of Artificial Intelligence on Society

### Person Weight Estimation Using Image recognition and ML

I have chosen this project for my artificial intelligence course. Features to be extracted using image recognition and trained on machine learning to find weight of person.

### **WORK EXPERIENCE**

### Sentiment Analysis **TERADATA**

11/2017 - 08/2017

Loading Real Time Twitter Tweets using Flume in Hadoop Framework and performing sentiment analysis by using dictionary of rated words.

### **SKILLS & COMPETENCIES**

C/C++, Java, MySQL, HTML5, CSS3, JavaScript, Vue.js, Golang, Python, Android

Operating Systems: Windows, Linux (Many Distributions) and

Microcontroller Interfacing: RaspberryPi,Arduino, 8051,PIC

Engineering Tools: Proteus, Creo, MATLAB

### **ACHIEVEMENTS**

### Introduction to CS50 by Harvard University (06/2017 - 08/2017)

Introduction to Computer Science but must take for everyone. The course starts from humble beginnings of bits to the higher web and application

#### Android Basic Nanodegree By Udacity (01/2017 – 05/2017)

Completed Android Basics Nano degree Course by Google from Udacity. Did not bought any certification. Familiarity with Android but Nowadays learning

System Administrator GIK WebTeam (08/2017 – Present)

Ex-Member of Netronix

On Dean's Honor Roll in 4th Semester

Lead Front End Team GIK WebTeam

Organized ICPC 2018 with ACM GIK.

Honorary Member ACM GIK.

### FINAL YEAR PROJECT

#### Indoor Navigation System (08/2017 – Present)

An android application that can be used to navigate in an indoor environment. The great catch of the project that it does not require any extra infrastructure i-e WIFI, Beacons , BLE etc. For this system to work, we collect different sensors data and apply machine learning algorithms on it.

Technology Stack: Java and Android for Apps, Golang for Server Side and Python for Machine Learning and Core Algorithm Computation

Android Apps will communicate with the golang server which then executes the relevant python scripts and send location back to the phone.

### **LANGUAGES**

Enalish Urdu Sindhi

## INTERESTS AND EXTRA **CURRICULARS**

**Books** 

**Programming Languages** 

Interesting Discussion

Computer Science

Running